



About The Denver Center for the Performing Arts

The Denver Center for the Performing Arts (DCPA) presents and produces live theatre with Broadway touring shows, cabaret productions and a professional theatre company. The DCPA also is the site of training schools for actors and unique rental facilities. The Tony Award-winning Denver Center Theatre Company is the largest professional theatre company between Chicago and the West Coast.

The Challenge

With multiple buildings spread across a 12-acre campus, DCPA was experiencing a growth in wireless usage resulting in the need for more bandwidth. With VMware deployed, the DCPA also looked to leverage their VMware investment whenever possible.

The Solution

DCPA selected ADTRAN's vWLAN solution operating on VMware. In addition, DCPA has deployed ADTRAN's Bluesocket 1800 and 1840 wireless access points campus-wide.

The Benefit

With ADTRAN's vWLAN solution DCPA has increased bandwidth capacity and scalability in the future; centralized control of all access points and wireless hand-held scanners; enforced security at the access point to eliminate unwanted LAN traffic; and implemented role-based login credentials with specific policies for staff, guests and rental venues.

ADTRAN's virtual Wireless LAN (vWLAN) Solution Provides Increased Bandwidth and Unsurpassed Scalability to The Denver Center for the Performing Arts.

The Denver Center for the Performing Arts (DCPA)

As the flagship theatre of the Rocky Mountain region, the not-for-profit DCPA has 10 performance venues on its four-block, 12-acre campus, annually serving 750,000 patrons and 50,000 students.

The DCPA encompasses the following entities:

- **Denver Center Theatre Company**, a Tony Award-winning professional resident theatre, which produces classic and contemporary plays, revivals and world premieres.
- **Denver Center Attractions**, presenter of blockbuster Broadway musicals and cabaret.
- **National Theatre Conservatory**, a Congressionally-chartered Master of Fine Arts program.
- **Denver Center Theatre Academy**, a theatre education program offering acting instruction to individuals and opportunities for schools.

The Challenge for DCPA

As a non-profit with ticket sales paying for less than half of their production and theatre education program costs, DCPA relies heavily on contributions from donors. Investments in infrastructure are carefully examined to ensure cost efficiencies—not only at the time of purchase but also in the future.



"vWLAN is an impressive, cost-effective solution and we couldn't be more thrilled."

John H. Voorheis
Manager of Infrastructure

Supporting multiple buildings within a 12-acre campus, growth in wireless usage caused the need for more bandwidth. The DCPA's wireless usage consists of various user groups, all with specific needs and defined access parameters. With VMware® deployed, the DCPA also looked to leverage their VMware investment whenever possible.

The Solution

DCPA selected ADTRAN's virtual Wireless LAN (vWLAN®) solution operating on VMware to migrate away from a hardware-based controller solution, achieving future scalability, increased bandwidth while leveraging all the advantages of virtualization.

ADTRAN's solution transitioned the WLAN to the software-based vWLAN solution on VMware. In addition, DCPA deployed ADTRAN's Bluesocket® 1800 and 1840 high-performance, dual-radio 802.11n wireless access points with 3rd party external antennas to provide extended range coverage.



Bluesocket 1800



Bluesocket 1840





The Denver Center
for the Performing Arts

“(ADTRAN) Bluesocket enabled us to move WLAN control into the data center on VMware releasing us from a physical controller and giving us high availability and portability of the controller through our virtual infrastructure—increasing bandwidth and providing unsurpassed scalability.”

John H. Voorheis,
Manager of Infrastructure

The Benefits of ADTRAN's vWLAN Solution

Some of the key benefits that The DCPA has experienced since deploying ADTRAN's vWLAN solution include:

Increased Scalability

- Elimination of the physical WLAN hardware controller to:
 - increase bandwidth to the capacity of over 300 Gbps since system capacity is no longer determined by the backplane capacity of a hardware controller
 - leverage the scale capabilities of virtualization and the data center
- Scaling wireless capabilities through software on the access point and virtualized control rather than wireless-only hardware

Reduced Risk

- Security at the access point to ensure that unwanted and undifferentiated traffic never enters the LAN
- Advanced guest access services to accommodate specific needs of various user groups
- Simplified implementation and expansion due to a software-based virtual controller residing in the datacenter

Lower Costs

- One single software-based control instance on VMware at the data center rather than the added cost of multiple, disbursed hardware-based controllers
- Cost savings recognized from:
 - implementing a virtual software-controller rather than costly hardware-based controllers expenditures
 - a reduction of energy costs since a hardware-controller accounts for 80% of the power consumption costs

The DCPA is pleased with their deployment of ADTRAN's vWLAN solution and can now ensure the cost efficient operation and scalability of their wireless LAN today and in the future.

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